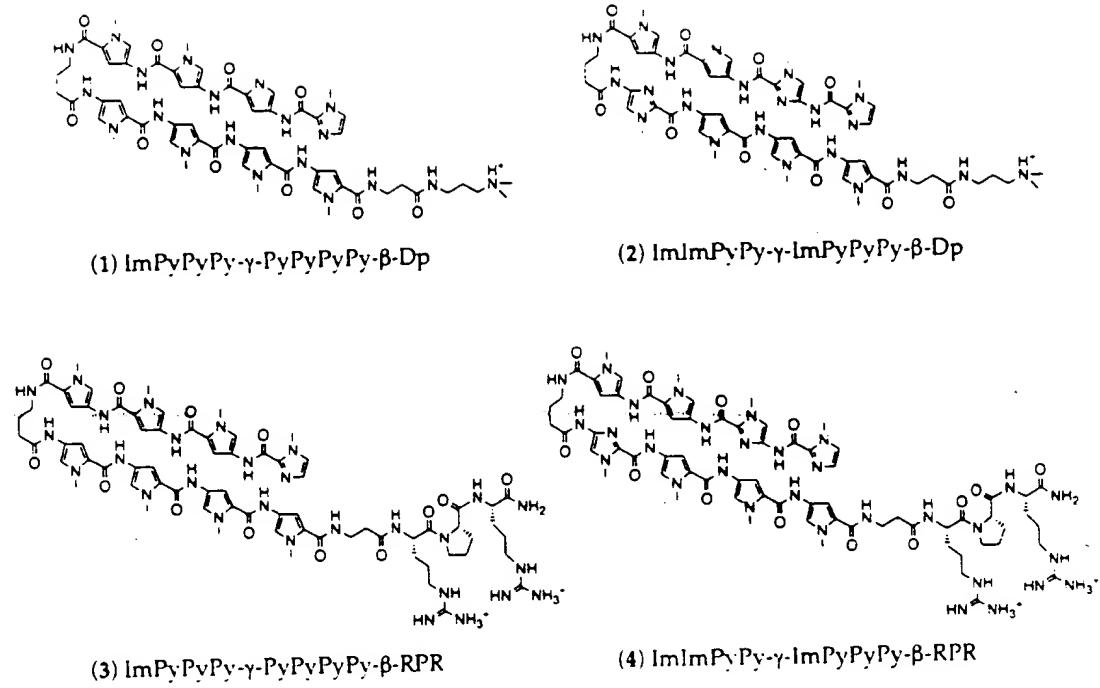
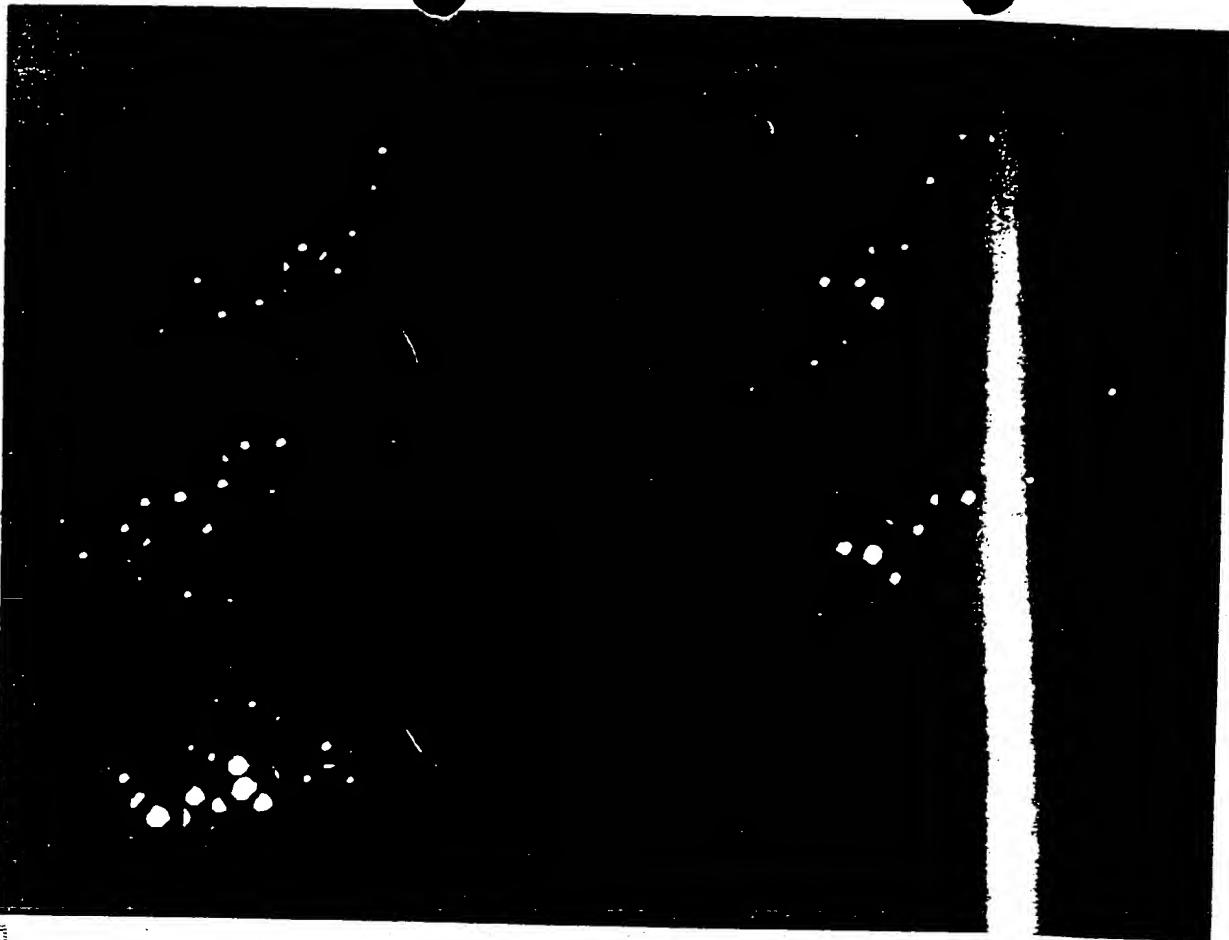


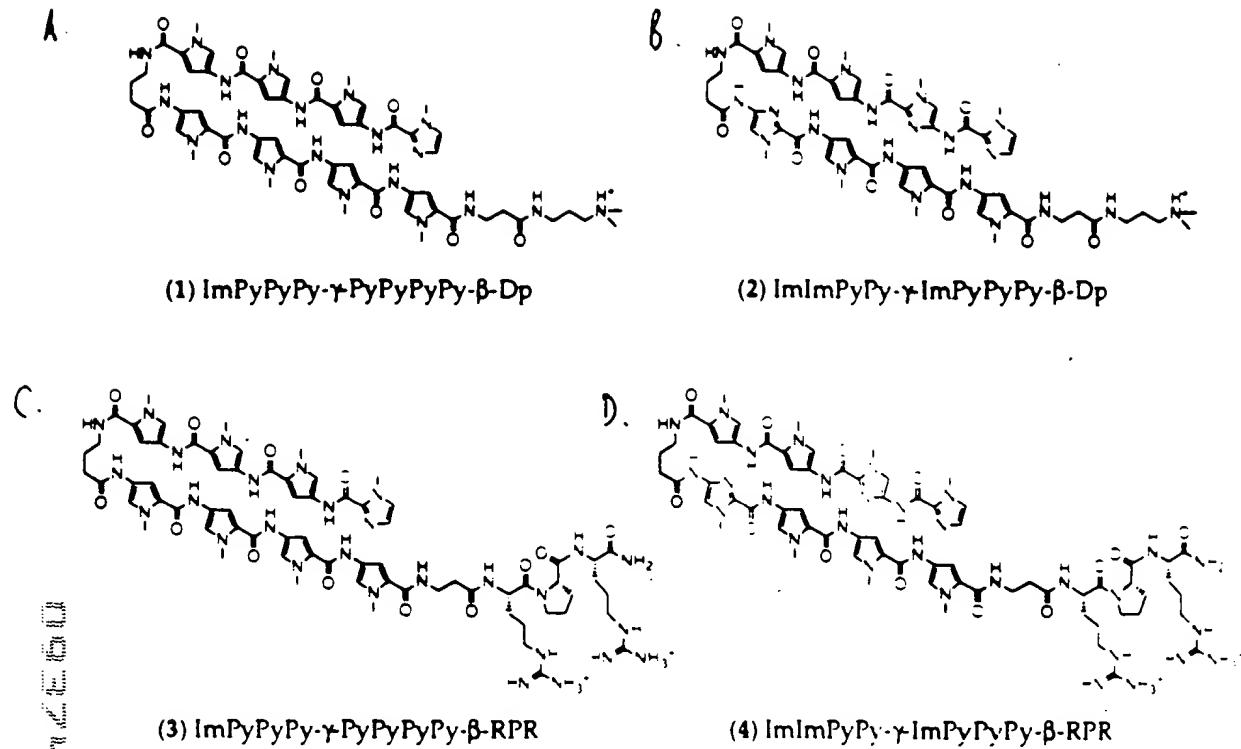
## FIGURE 1



**FIGURE 2**



**FIGURE 3**



**FIGURE 4**

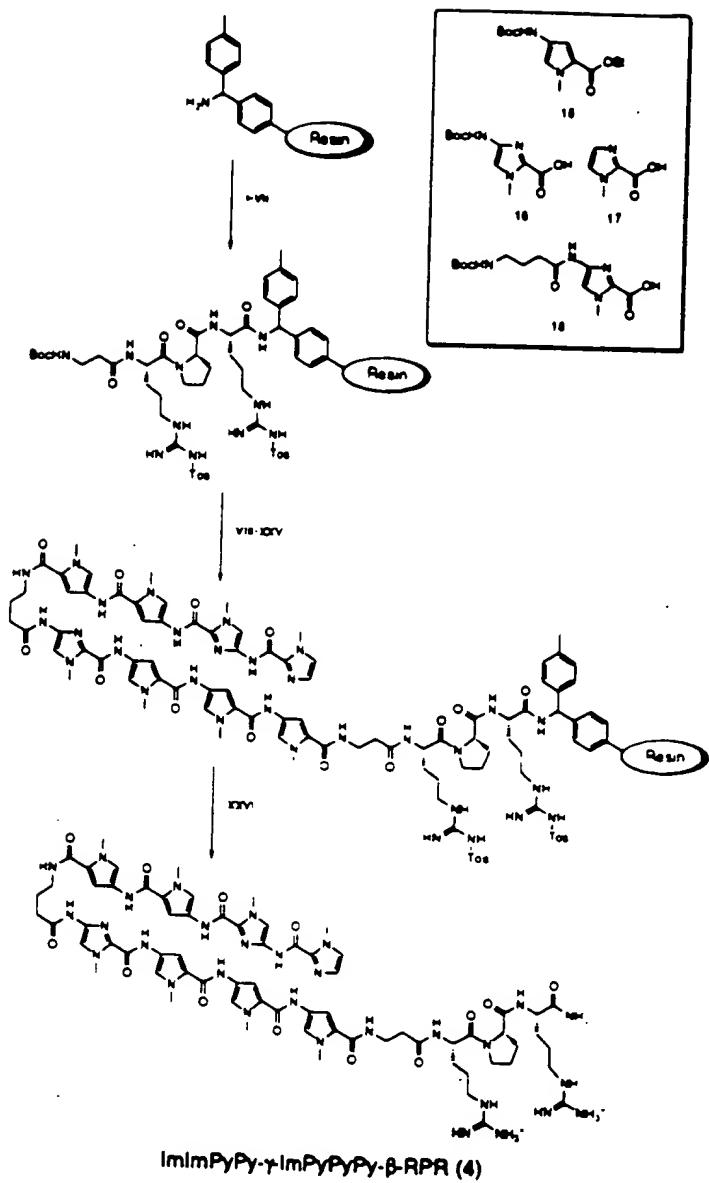


FIGURE 5

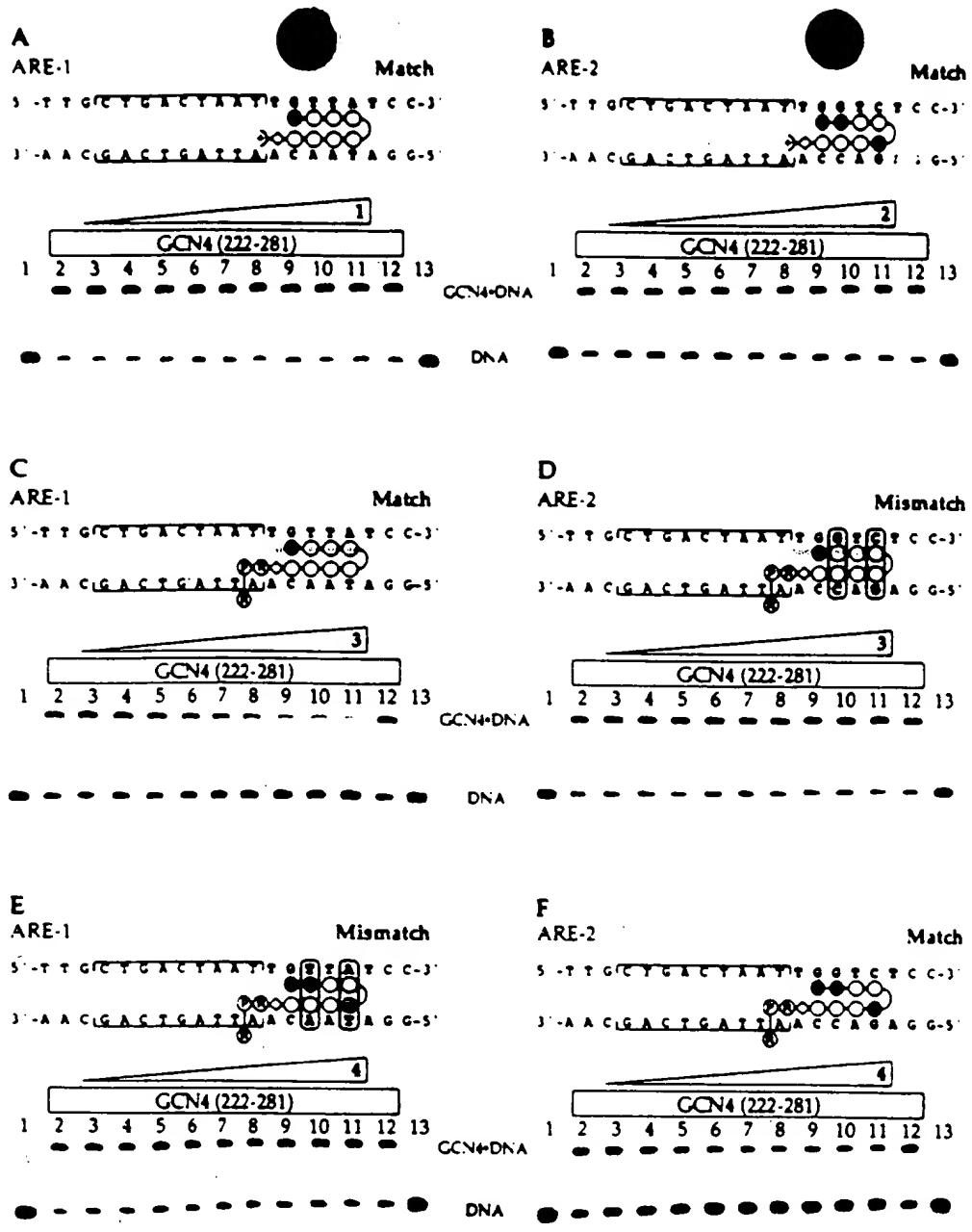
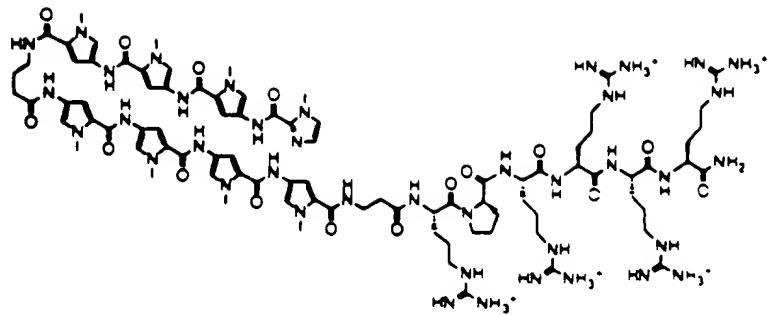
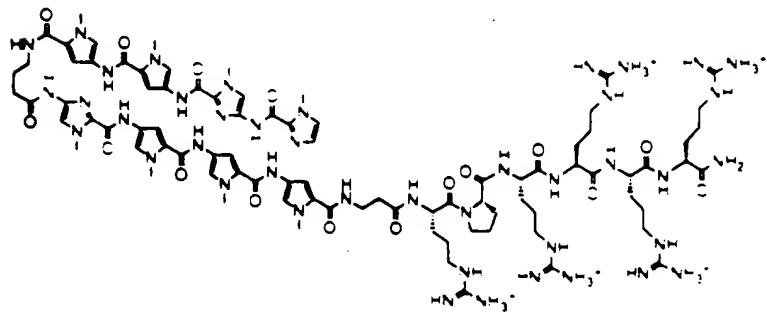


FIGURE 6

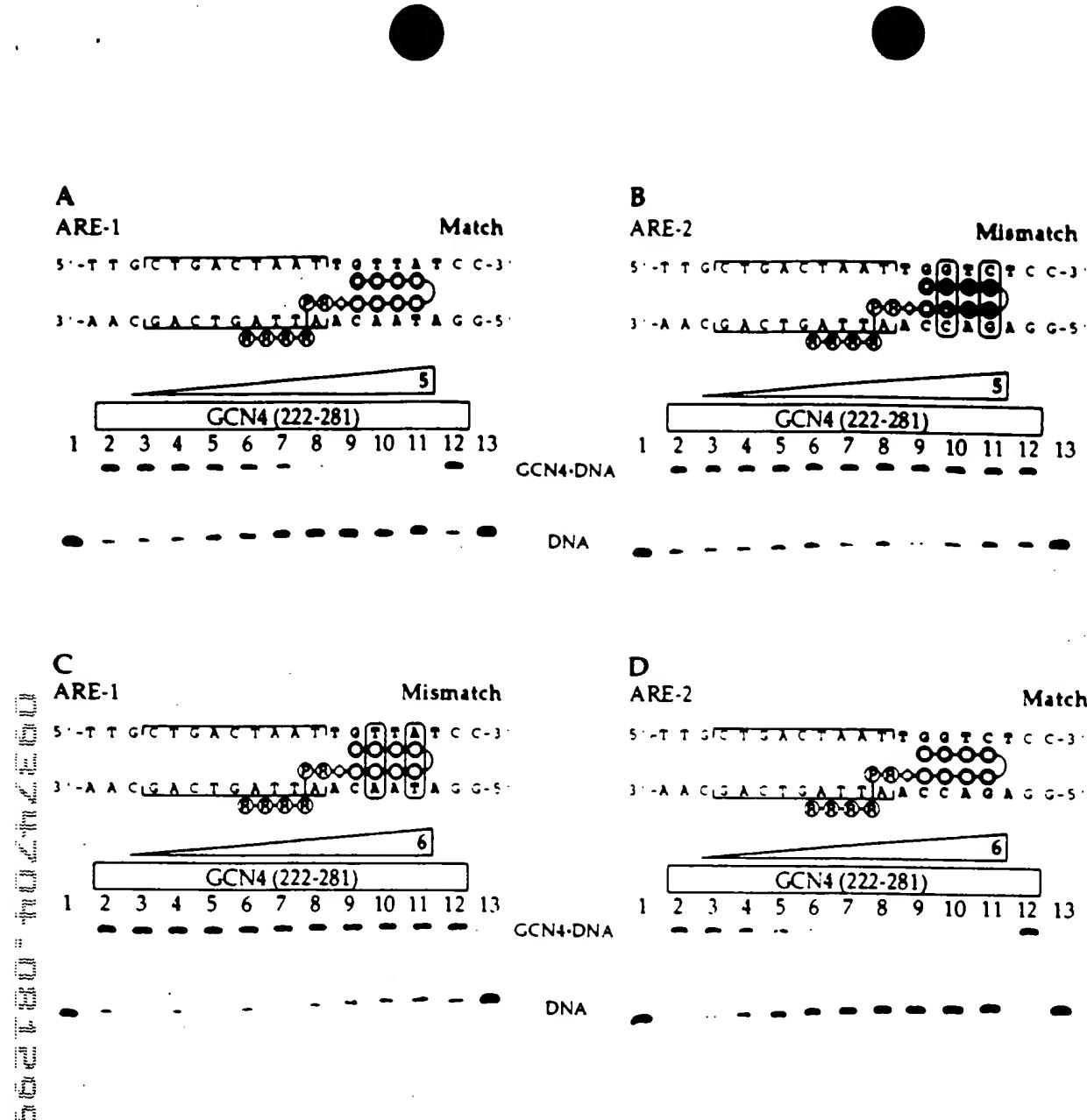


(5)-ImPyPyPy- $\gamma$ -PyPyPyPy- $\beta$ -RPRRRR

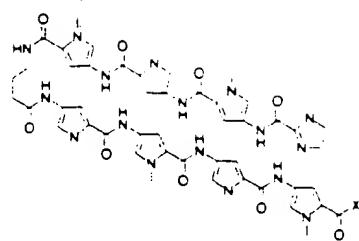


(6)-ImImPyPy- $\gamma$ -ImPyPyPy- $\beta$ -RPRRRR

**FIGURE 7**



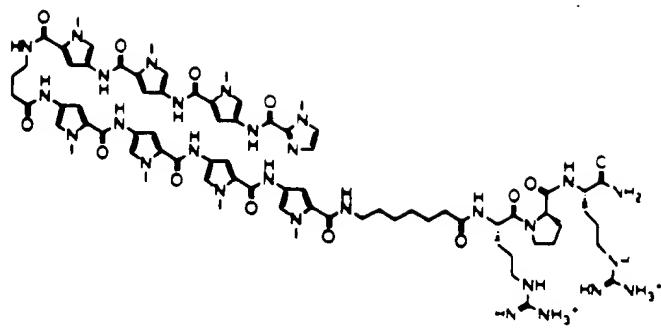
**FIGURE 8**



ImPyPyPy- $\gamma$ -PyPyPyPy-X

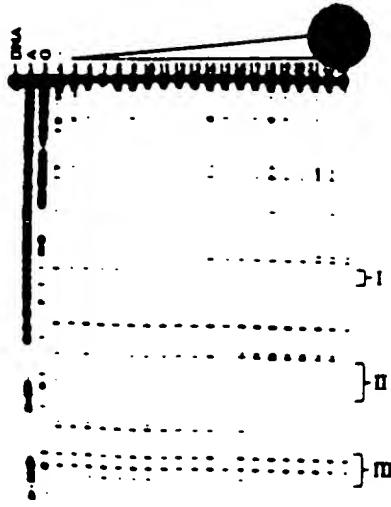
Polyamide	X =	Inhibition	Polyamide	X =	Inhibition	
1		$\beta$ -Dp	-		$\beta$ -RDPR	-
3		$\beta$ -RPR	++		$\beta$ -APR	-
7		$\beta$ -R	-		$\beta$ -KPR	+
8		$\beta$ -RP	-		$\beta$ -RPK	++
9		$\beta$ -RGR	+		$C_7$ -RPR	-

FIGURE 9



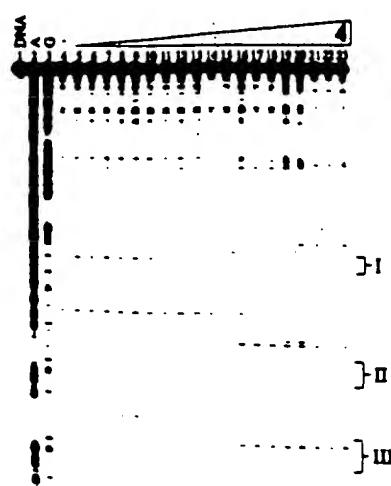
(14) ImPyPyPy- $\gamma$ -PyPyPyPy-C7-RPR

**FIGURE 10**



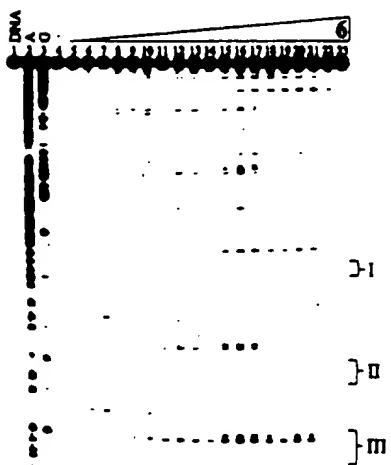
**ImImPyPy- $\gamma$ -ImPyPyPy- $\beta$ -Dp  $K_a$  (M $^{-1}$ )**

I	5'-AATCATGOTCAT A-3'		$1.3 \times 10^{10}$
II	5'-CTCATTTGGACAGC-3'		$6.4 \times 10^9$
III	5'-CTCATTTGATACAGC-3'		$\leq 5 \times 10^7$



**ImImPyPy- $\gamma$ -ImPyPyPy- $\beta$ -RPR**

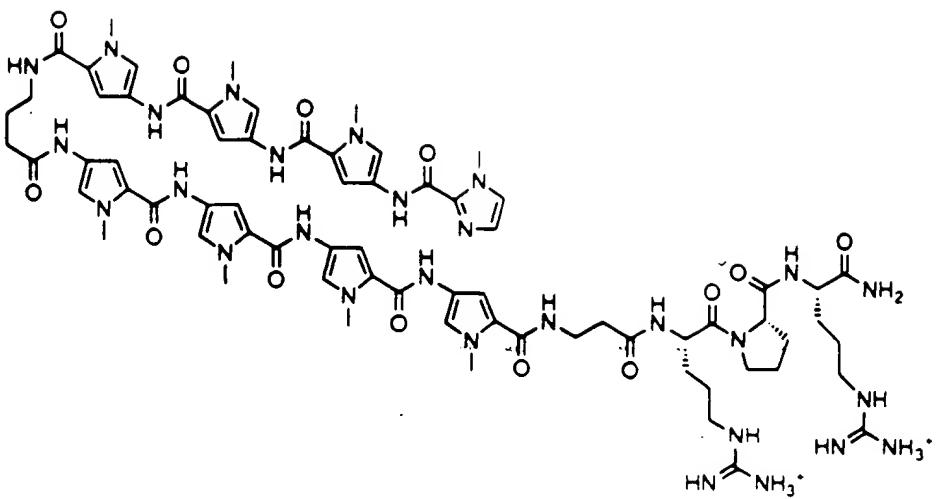
I	5'-AATCATGOTCAT A-3'		$4.6 \times 10^9$
II	5'-CTCATTTGGACAGC-3'		$6.6 \times 10^9$
III	5'-CTCATTTGATACAGC-3'		$\leq 1 \times 10^7$



**ImImPyPy- $\gamma$ -ImPyPyPy- $\beta$ -RPRRRR**

I	5'-AATCATGOTCAT A-3'		$2.6 \times 10^{10}$
II	5'-CTCATTTGGACAGC-3'		$2.8 \times 10^{10}$
III	5'-CTCATTTGATACAGC-3'		$1.9 \times 10^{10}$

**FIGURE 11**



Pyrrole/Imidazole Polyamide defines  
DNA binding affinity and specificity.

**POSITIVE PATCH**

**FIGURE 12**

5' TCTCTCCTCCTCTC T — (T)<sub>n</sub> — T CCTCTCTCTCTCCT 3'  
5' AGAGAGGAGGAGAG A C A A G T A C T A T A GGAGAGAGAGAGGA 3'

A-1



3' TCTCTCCTCCTCTC T G T T C A T G A T A T CCTCTCTCTCCT 5'

5' TCTCTCCTCCTCTC T — (T)<sub>n</sub> — T CCTCTCTCTCTCCT 3'  
5' AGAGAGGAGGAGAG A C A A G T A C T A T A GGAGAGAGAGAGGA 3'

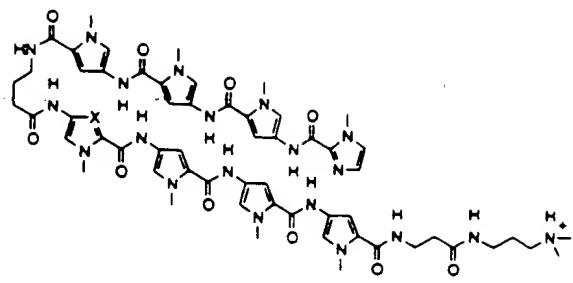
A-2



3' TCTCTCCTCCTCTC T G T T C A T G A T A T CCTCTCTCTCCT 5'

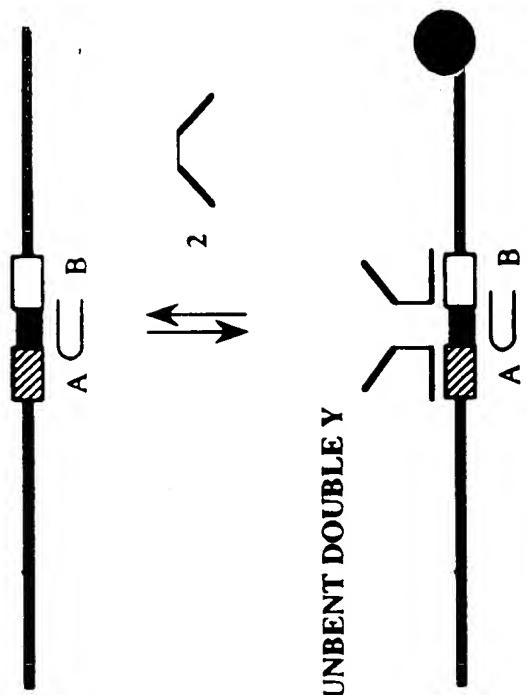
n=2-6, 9

**FIGURE 13**

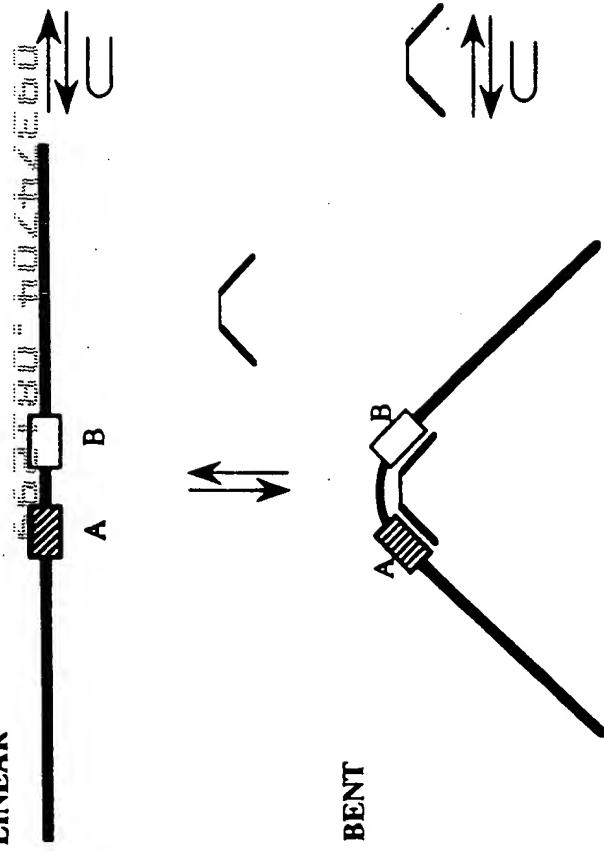


**FIGURE 14**

POLYAMIDE-BOUND



LINEAR



BENT

UNBENT DOUBLE Y

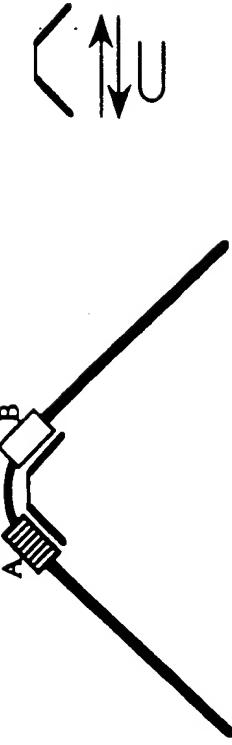


FIGURE 15

oligonucleotide      2    2    3    3  
polyamide            -    +    -    +

**FIGURE 16**

oligonucleotide  
polyamide

2 2 2  
1 2 1 2

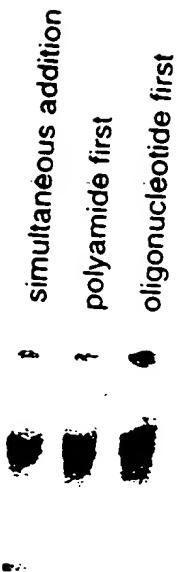
**FIGURE 17A**

## oligonucleotide polyamide

- - - 9 9 9  
- 1 2 - 1 2



### FIGURE 17B



**FIGURE 18**